### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.15

# SOURCE INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** SIR-002991 Address: 333 Burma Road **Date Inspected:** 06-Jan-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Dao, Shangha

**Quality Control Contact:** Don Walton **Quality Control Present:** Yes No

N/A **Material transfer:** Yes **Sampled Items:** Yes No N/A No **Stock Transfer:** N/A N/A Yes No OK to Cut: Yes No **Rebar Test Witness:** N/A **Delayed/Cancelled:** N/A Yes No Yes No

Other: Coatings Inspection

**Bridge No:** 34-0006 **Component:** Sub-Assemblies (OBG), OBG and Office.

**Bid Item:** Lot No: 77,78,79

### **Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. Kenneth W. Cason Jr. arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections is to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

Sub-Assemblies (OBG)

Bike Path Panels (BK4A-018, 025, 027, 028, 030 and 036), NOI Number 5616: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Bike Path Panels (BK4A-018, 025, 027, 028, 030 and 036) was tested in accordance with SSPC-SP 1 (Surface Cleanliness). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection prior to proceeding with process to the next check point due to over-spray, holidays and high DFT readings.

Crash Barrier External Surfaces (37 Each), NOI Number 5617: In accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the final coat installation on Crash Barrier External Surfaces (37 Each). Defects (high DFT runs and sags) noted in Crash Barrier E2-SB1047 P83.5-83. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection prior to proceeding with process to the next check point. No other discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Shim Plates CBFUP4 (5 Each) and Stiffeners SEG PP108 (4 Each), NOI Number 5618: In accordance with

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project specifications, ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Shim Plates CBFUP4 (5 Each) and Stiffeners SEG PP108 (4 Each) in preparation for blasting operations. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to the presence of oil and grease on substrate.

Shim Plates CBFUP4 (5 Each) and Stiffeners SEG PP108 (4 Each), NOI Number 5619: In accordance with project specifications, ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Shim Plates CBFUP4 (5 Each) and Stiffeners SEG PP108 (4 Each) in preparation for blasting operations. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Shim Plates (110 Each), L-splices STS1E1-01/1 (13 Each), Shim Plates CBFUP4 (5 Each), Stiffeners SEG PP108 (4 Each) and Break STS1E1-01/1 (7 Each), NOI Number 5621: In preparation for undercoat installation and in accordance with project specifications, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Shim Plates (110 Each), L-splices STS1E1-01/1 (13 Each), Shim Plates CBFUP4 (5 Each), Stiffeners SEG PP108 (4 Each) and Break STS1E1-01/1 (7 Each). Test results recorded x3 surface profile readings in the range of 76 to 81 µm. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Maintenance Travel Rail Brackets (28 Each), NOI Number 5622: In preparation for finish coat Interfine 979 Polysiloxane installation and in accordance with project specifications and SSPC-SP 1, this inspector along with ABF and ZPMC Quality Assurance/Control representatives observed the surface preparation on Maintenance Travel Rail Brackets (28 Each). No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Crash Barrier Cover Plates (727 Each), NOI Number 5608: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Crash Barrier Cover Plates (727 Each) for dry film thickness (DFT) compliance. Recorded DFT readings were low out of specification range. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection.

Splice (X71 and X72), Shim Plate (X213G and X209N), Shim Plate CBFUP4 and L-Splices X3160N (60 Each), NOI Number 5625: In accordance with project specifications, ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Splice (X71 and X72), Shim Plate (X213G and X209N), Shim Plate CBFUP4 and L-Splices X3160N (60 Each) in preparation for blasting operations. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection due to the presence of oil and grease on substrate.

Crash Barrier External Surfaces (75 Each), NOI Number 5627: In preparation for mist coat installation of Interfine 979 Polysiloxane, the Interzinc 22 undercoat on Crash Barrier External Surfaces (75 Each) was tested in accordance with SSPC-SP 1 (Surface Cleanliness). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection prior to proceeding with process to the next check point due to wet paint, runs and sags.

Service Platform SP6-02, NOI Number 5628: In preparation for mist coat installation of Interfine 979

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Polysiloxane, the Interzinc 22 undercoat on Service Platform SP6-02 was tested in accordance with SSPC-SP 1 (Surface Cleanliness). ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection prior to proceeding with process to the next check point due to out of range DFT readings and over spray on surfaces.

Splice (X71 and X72), Shim Plate (X213G and X209N), Shim Plate CBFUP4 and L-Splices X3160N (60 Each), NOI Number 5629: In accordance with project specifications, ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Splice (X71 and X72), Shim Plate (X213G and X209N), Shim Plate CBFUP4 and L-Splices X3160N (60 Each) in preparation for blasting operations. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

Shim Plates CBFUP4 (3 Each) and Assembly Plate AP3005, NOI Number 5630A: In accordance with project specifications, ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on Shim Plates CBFUP4 (3 Each) and Assembly Plate AP3005 in preparation for blasting operations. No discrepancies noted and ABF Quality Assurance personnel instructed ZPMC to proceed with process to the next check point.

#### **OBG**

L11E OBG Internal Floor from PP104 to PP107, NOI Number 5624: In accordance with project specifications ABF and ZPMC Quality Assurance/Control representatives observed the surface condition on L11E OBG Internal Floor from PP104 to PP107 for dry film thickness (DFT) compliance. Recorded DFT readings were low out of specification range. ABF Quality Assurance personnel instructed ZPMC to re-work and re-submit for inspection.

### Office

This Quality Assurance Inspector (QA) reviewed, recorded, and entered data from notice of inspection requests for the purpose of tracking and compliance to contract documents.

Note: Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### **Summary of Conversations:**

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

Inspected By:	Cason, Kenneth	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer